




The Relationship Between Health Personnel and Family Support on Treatment Motivation of Pulmonary Tuberculosis Patients

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ARTICLE INFORMATION

Article process

Submission : February 27, 2025
Revision : May 1, 2025
Accepted : May 2, 2025

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Cite this as:

Hernugroho, A., Amal, A. I., Melastuti, E., & Hendrawan, G. S. (2025). The Relationship Between Health Personnel and Family Support on Treatment Motivation of Pulmonary Tuberculosis Patients. *SURYA: J. Media Komunikasi Ilmu Kesehatan*, 17 (1), 18-25. <https://doi.org/10.38040/js.v17i1.1151>

ABSTRACT

Introduction: Tuberculosis (TB) is one of the 10 leading causes of death in the world. TB treatment that requires regularity over a long period of time has an impact on decreasing motivation for treatment in TB patients, this decrease in motivation can cause boredom which results in incomplete TB treatment. One of the external factors that can increase motivation for treatment is support from health personnel and family. This study aims to determine relationship between support from health personnel and family with treatment's motivation in Pulmonary TB patients.

Methods: This quantitative study uses a correlation analysis design with a cross-sectional approach. The sample in this study was 70 Pulmonary TB patients who were taken using the total sampling technique. Data collection was carried out using a valid and reliable questionnaire to measuring health personnel's support and family also treatment's motivation. Data analysis was carried out using the Spearman Rank test.

Results: A total of 44 patients (62.9%) felt good support from health personnel, 51 patients (72.9%) felt good family support, and 44 patients (62.9%) had high treatment's motivation. There was a significant relationship between health personnel's support ($p = 0.001$; $r = 0.344$) and family's support ($p = 0.0001$; $r = 0.497$) with treatment's motivation.

Conclusion: There is a significant relationship between health personnel's support and family with treatment's motivation for pulmonary TB patients. Health personnels can visit families' homes to provide support to increase patient motivation.

Keywords: Family, Health Personnel, Motivation, Support, Tuberculosis

INTRODUCTION

Based on recorded data, the number of tuberculosis (TB) cases in Indonesia reached 360,770. Data analysis by gender shows that the proportion of TB sufferers is higher in men than women. Among the 34 provinces in Indonesia, West Java recorded the highest number of TB cases (Kementerian Kesehatan RI, 2018). According to the World Health Organization (2020), TB has infected approximately 6.4 million individuals worldwide. This disease is also one of the top ten leading causes of death globally, with a death toll reaching 1.3 million people.

Therapy failure is often caused by patient non-compliance in taking medication according to the prescribed regimen. Patients tend to stop treatment prematurely due to weariness of consuming many drugs over a long period. Patient compliance behavior is influenced by a complex interaction between predisposing factors, enabling factors, and reinforcing factors (Notoamodjo, 2014).

There is a close relationship between family support and patient adherence levels in taking medication. Family support is an integral component of social support, which includes support from partners, parents, children, and other family members (Rumimpunu et al., 2018). The success of medical interventions often depends on the existence of strong interpersonal support systems for individuals undergoing treatment (Safari & Chandra, 2017). In addition to family support, health personnels also play a crucial role in improving the quality of optimal health services for the community. This contributes significantly to improving the recovery process of pulmonary TB patients, especially in terms of patient compliance with the pulmonary TB treatment regimen.

Motivation has a significant influence on the level of TB patient compliance in taking medication. Providing motivation to pulmonary TB sufferers can improve treatment success through consistent reminders

regarding the importance of adherence to the regimen being undertaken (Sukmana & Susanty, 2019). Data from the Brebes District Health Office shows an increase in the number of pulmonary TB patients treated at RS Bhakti Asih Brebes in the last three years. In 2022, there were 33 patients undergoing treatment. This number increased significantly in 2023 to 61 patients. However, in 2024, the number of patients treated slightly decreased to 57 people.

Based on interviews with 5 TB patients, variations in family support related to ease of access to health facilities were revealed. Three patients reportedly were sometimes accompanied by family, while the other 2 patients routinely traveled on their own. Furthermore, 2 patients expressed feelings of being weary of their illness and the perception that they were becoming a burden to their families. Conversely, three other patients experienced difficulties in daily activities due to their illness and felt they received insufficient attention from their families, which potentially caused irregularities in taking medication. This study explores the influence of health personnel support and family support on the treatment motivation of pulmonary tuberculosis (TB) patients, which has not been extensively examined in prior research.

This research aims to determine the relationship between health personnel and family support with treatment motivation in pulmonary TB patients.

METHOD

This quantitative study employs a correlational analysis design with a cross-sectional approach. The population in this research were pulmonary TB patients, totaling 70 patients. Sampling used a non-probability total sampling technique, where the entire population was taken as the research sample.

The independent variables in this study were the perceived support from health

personnels and family by pulmonary TB patients, while the dependent variable in this study was the treatment motivation of pulmonary TB patients. Support from health personnels and family was measured using a questionnaire adapted from Afriani's (2014) research, consisting of 20 questions covering aspects of informational support, appraisal support, instrumental support, and emotional support. This questionnaire has an item-to-item correlation value ranging from 0.387 to 0.791 and an r table value of 0.361, while the Cronbach's alpha value is 0.915. The treatment motivation of pulmonary TB patients was measured using a questionnaire containing 20 item questions with an item-to-item correlation value range of 0.555 to 0.972, while the Cronbach's alpha value is 0.908.

This research has passed ethical review by the Health Research Ethics Committee of the Faculty of Nursing, Universitas Islam Sultan Agung with number 1412/A.1-KEPK/FIK-SA/XII/2024.

RESULTS

A total of 70 respondents were obtained. The research results indicate that the highest number of respondents in the age group were \geq 45 years old, with 22 people (32.7%), and the lowest age group was 20-25 years old, with 3 people (4.3%). Based on gender, the majority of respondents affected by pulmonary TB were male, with 37 respondents (52.9%). The highest education level among respondents was in the elementary school (SD) education group, with 23 respondents (32.9%), and the lowest was in the junior high school (SMP) education group, with 13 respondents (18.6%). Based on occupation groups, the largest group was private sector employees, with 32 respondents (45.7%) (Table 1.).

Table 2 shows that the majority of TB patients have good family support, accounting for 51 respondents (72.9%). Meanwhile, most TB patients demonstrate high motivation for

Table 1. Respondent Characteristics (n = 70)

Characteristics	n	(%)
Age (year)		
20 – 25	3	4.3
26 – 35	24	33.6
36 – 45	21	29.4
\geq 45	22	32.7
Gender		
Male	33	47.1
Female	37	52.9
Level of Education		
Elementary	23	32.9
Middle	13	18.6
High	16	22.9
College	18	25.7
Job		
Housewife	31	44.3
Laborer	2	2.9
Private	32	45.7
Civil Servant	3	4.3
Self-Employed	2	2.9
Total	70	100

Table 2. Research Variables (n = 70)

Variables	n	(%)
Health Personnel Support		
Good	44	62.9
Low	26	37.1
Family Support		
Good	51	72.9
Low	19	27.1
Motivation		
High	44	62.9
Moderate	8	11.4
Low	18	25.7
Total	70	100

treatment, with 44 respondents (62.9%) falling into this category.

Based on the analysis results, the significance value obtained is $<$ 0.05. Therefore, there is a relationship between

Table 3. Relationship between Health Personnel and Family Support with Treatment Motivation in Pulmonary TB Patients (n = 70)

Health Personnel Support	Treatment Motivation								<i>r</i>	<i>p value</i>
	High		Moderate		Low		Total			
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%		
Good	24	34.3	5	7.1	15	21.4	44	62.8	0.344	0.001
Low	20	28.6	3	4.3	3	4.3	26	37.2		

Family Support	Treatment Motivation								<i>r</i>	<i>p value</i>
	High		Moderate		Low		Total			
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%		
Good	30	42.9	8	11.4	13	18.6	51	72.9	0.497	0.0001
Low	14	20	0	0	5	7.1	19	27.1		

health personnel support and family support with treatment motivation of pulmonary TB patients. The analysis results can be seen in Table 3.

From these results, it can be concluded that there is a low correlation between health personnel support and treatment motivation, with a coefficient value of 0.344. Meanwhile, family support has moderate correlation with treatment motivation, with a coefficient value of 0.497.

DISCUSSION

Health Personnel Support

The research findings indicate a duality in patients' perceptions of the support provided by health personnel in managing pulmonary TB. Some patients felt positively supported because health personnel provided comprehensive education about pulmonary TB, including detailed explanations regarding medication schedules. This education was considered helpful for patients in understanding their illness and improving adherence to treatment.

Previous research reinforces this argument, stating that health personnel performance is a significant factor influencing the quality of healthcare services. In the context of healthcare services for Pulmonary Tuberculosis (TB) patients, health personnel performance directly or indirectly correlates with the level of patient treatment adherence (Salamung et al., 2019). This treatment

adherence ultimately becomes a primary determinant in treatment outcomes. Thus, it can be concluded that the role of health personnel is essential in supporting the recovery process of pulmonary TB patients, especially in aspects of adherence to the treatment regimen.

Health personnel support is a system that provides assistance to patients, encompassing information, advice, practical help, or actions that positively impact patient emotions or behavior. This support aims to provide a sense of comfort, attention, empathy, acceptance, and care. The role of healthcare professionals is crucial in improving public health through the provision of healthcare services (Siwi, 2018). Cognitive support involves providing information, instructions, suggestions, or advice to patients. Interactions between health personnels and TB patients occur at various service points, such as community health centers (puskesmas), laboratories, medication pick-up locations, and during home visits.

The results of this study indicate that health personnels have actively provided education about TB to patients. This intervention is carried out both when patients visit health facilities (hospitals) and through home visits conducted by health personnels. Based on interviews with TB patients, it was revealed that health personnels consistently emphasize the importance of adherence to treatment. This emphasis is intended to prevent the occurrence of Multi-Drug

Resistant (MDR) TB, a condition where TB bacteria become resistant to Anti-Tuberculosis Drugs (ATDs). This resistance will complicate patient recovery efforts.

Health personnel support is a significant factor influencing the level of patient adherence to the treatment regimen. Health personnel intervention is crucial in motivating patients to internalize the importance of newly adopted health behaviors. This can be achieved through the continuous expression of enthusiasm for certain patient actions, as well as providing positive reinforcement for patient success in adapting to their treatment program. Health personnel performance has implications for the overall quality of healthcare services, including services for tuberculosis patients. This service quality, both directly and indirectly, will impact patient treatment adherence, which ultimately determines the prognosis of recovery.

The research results show a positive correlation between the support provided by health personnels and the level of patient adherence to treatment; the health personnel encouragement variable has a significant influence on pulmonary TB patient treatment adherence with a significance value of 0.012.

These research findings are consistent with a previous study, which indicated that health personnels play a significant role in improving treatment adherence for pulmonary tuberculosis patients. It affirms that the essence of the health personnel role cannot be ignored. Various strategies have been implemented by health personnels, including organizing cross-sectoral health education, establishing Medication Supervisors (Pengawas Minum Obat - PMO), and continuous efforts to motivate patients to remain enthusiastic about undergoing treatment (Amal et al., 2023; Sianturi & CB, 2020).

The role of health personnels in the context of patient care extends beyond simply providing medical services. They function as a

comprehensive support system, providing assistance in various forms tailored to patient needs. This assistance can be in the form of informational support, instrumental support, and emotional support (Rohmah et al., 2025).

Reciprocal support between healthcare providers and patients, as well as patient trust in the continuity of healthcare services, are crucial factors that facilitate patient treatment completion. The effectiveness of therapy in pulmonary TB patients is highly influenced by the quality of healthcare services received. This healthcare service has two important dimensions: first, the technical dimension that focuses on meeting standards and specifications of health products, and the user perception dimension that emphasizes the level of patient satisfaction and expectations of the services provided (Supriyantoro, 2012).

Based on research findings published by Netty in 2018, a correlation was identified between health personnel performance and the level of adherence of sputum smear-positive pulmonary Tuberculosis patients in carrying out the treatment regimen. Consistent with these results, a study conducted by Sugiono (2014) also indicated a significant relationship between health personnel support and the level of adherence to consuming Anti-Tuberculosis Drugs (ATDs) in individuals affected by pulmonary TB.

Patient adherence to TB treatment, especially in the intensive phase, is significantly influenced by family support. Patient tendencies to feel weary and stop treatment prematurely are major factors in the problem of non-adherence. Sources of social support for individuals in general are identified as originating from close relatives, which include spouses, parents, children, and other family members. This social support is divided into two main categories, namely emotional support, which is manifested in the form of validating feelings, providing advice or information, and instrumental support, which is in the form of material assistance. This research aims to examine in depth whether

families provide continuous support during the patient's TB treatment process, both in the intensive and continuation phases. The focus of the research is not only on the presence of family, but also on the active support and care they provide. This aspect will be an important consideration in planning effective treatment strategies for TB patients.

Family Support

Family support plays a crucial role in enhancing patient adherence to medication regimens. A supportive family is perceived by individuals as consistently present to offer assistance, thereby motivating patients to adhere to their treatment regularly. The attention and support provided by families, particularly in monitoring and reminding patients about medication consumption, has the potential to improve patient compliance levels (Pakilaran et al., 2022).

In the context of health, the family entity performs a significant supportive function in an individual's curative and rehabilitative journey. This role is essential in facilitating the achievement of comprehensive well-being for family members experiencing health dysfunctions. This implies that positive family support can influence a patient's adherence to medication. This support can take the form of encouragement, which is expected to enhance patient compliance with treatment (Setyoadi et al., 2018).

Previous study also indicates that family support plays an important role in the recovery of pulmonary tuberculosis patients. Families function as providers of information, feedback, and advice, all of which contribute to the monitoring and success of treatment (Desalegn et al., 2022).

Relationship Between Health Personnel Support and Motivation

Health personnel support plays a critical role in motivating pulmonary tuberculosis (TB) patients to adhere to treatment by fostering

trust, providing education, and offering emotional reinforcement. Research shows that consistent healthcare provider support improves treatment adherence by 30% (Shahin et al., 2021), while WHO emphasizes that personalized communication reduces default rates. Self-Determination explain that autonomy-supportive care enhances intrinsic motivation, health workers shape perceived treatment benefits, and Social Support have role in reducing stress and stigma. Patient-centered approaches—such as empathetic counseling, milestone recognition, and Directly Observed Treatment (DOT)—strengthen commitment, with studies (Chang, 2020) confirming that patients with supportive providers are more likely to complete therapy. Thus, health personnel act as pivotal motivators by merging medical guidance with psychosocial support, directly influencing treatment success.

Relationship Between Family Support and Motivation

Family support significantly enhances treatment motivation in pulmonary tuberculosis (TB) patients by providing emotional encouragement, practical assistance, and social accountability throughout the lengthy treatment process. Studies demonstrate that patients with strong family support are 2-3 times more likely to complete TB treatment (Rizkiyatuazzahro et al., 2020), as family members help with medication reminders (practical support), reduce feelings of isolation (emotional support), and accompany patients to clinical visits (instrumental support). The Theory of Planned Behavior (Icek Ajzen, 1991) explains this effect, showing how family attitudes shape patients' perceived behavioral control and treatment intentions, while Social Cognitive Theory highlights how family modeling and encouragement boost self-efficacy. Culturally, families often serve as key decision-makers in healthcare, particularly in collectivist societies where family approval

heavily influences health behaviors (Bandura, 1969).

Previous research reveals that patients describe family support as "having someone to fight the disease with" (WHO, 2020), while clinicians report that involved families improve medication adherence by 40-50% through daily supervision and encouragement. However, excessive family control may backfire by reducing patient autonomy, suggesting that balanced, encouraging (rather than coercive) support yields optimal motivation. These findings underscore family support as both a protective factor against treatment abandonment and a crucial component in holistic TB care strategies. Based on research, both family support and encouragement from healthcare workers significantly influence whether pulmonary tuberculosis patients adhere to their medication regimens.

CONCLUSION

Based on the research objectives and the analysis that has been conducted, it can be concluded that there is a significant relationship between the support of health personnels and families with the motivation to seek treatment among pulmonary TB patients. Healthcare professionals have the potential to implement home visit interventions for patients' families. This intervention aims to increase patient motivation in undergoing treatment. In addition, families are advised to actively seek information from valid and reliable sources. This effort is expected to strengthen family support for patients, particularly in aspects related to the TB therapy regimen.

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